



Aerospace Education

CIVIL AIR PATROL AEROSPACE EDUCATION MISSION

This regulation defines the Civil Air Patrol (CAP) Aerospace Education (AE) program. It authorizes AE staff positions; provides for selection, orientation, and training of CAP AE officers; defines internal and external AE programs; and prescribes eligibility, selection criteria, and nomination procedures for national aerospace awards. Further information concerning the implementation of these provisions may be found in CAPP 15, *Aerospace Education Officers' Handbook*.

Note: Shaded areas identify new or revised material.

1. General:

a. The authority for CAP's aerospace education and training mission is derived from Title 36 of the United States Code, Section 40302. The law states that among the organization's purposes are "To provide an organization to encourage and aid citizens of the United States in contributing their efforts, services, and resources in *developing aviation* and in *maintaining air supremacy*" and "To provide *aviation education and training* especially to its senior and cadet members."

b. CAP aerospace education programs implement the AE mission's goals and objectives. These AE programs provide an understanding and appreciation of aviation and space exploration in our world. Aerospace education communicates knowledge, skills, and attitudes relating to aerospace activities and the total impact of air and space technology upon society.

c. CAP members are obligated to involve themselves in aerospace education. Members are required to:

- 1) Be informed on aerospace developments and issues.
- 2) Speak out on aerospace matters at appropriate formal occasions and during informal daily contacts.
- 3) Share aerospace knowledge and experiences with other CAP members and the general public.

2. **Aerospace Education - Civil Air Patrol.** CAP developed an internal and external aerospace education program. The **internal** program provides aerospace education to the CAP membership. The **external** program provides the general public with the aerospace education necessary to ensure the continuing development of aerospace supremacy.

a. **Internal Aerospace Education.** The internal AE program provides basic aerospace knowledge to both cadet and senior members.

1) **Cadet Members.** Aerospace education is a major part of the cadet program. Cadets study aerospace books and perform hands-on aerospace activities in a group or by themselves. Cadets must complete formal aerospace education requirements to progress through the various achievements of the cadet program. CAPR 52-16, *CAP Cadet Program Management*, defines the cadet program and outlines the aerospace education requirements.

2) **Senior Members.** **Aerospace Education Program for Senior Members (AEPSM)** is an integral part of the senior program and consists of five elements:

a) **Yeager Test.** This element is a self-paced study based on the CAP text, *Aerospace: The Journey of Flight*. All senior members have the responsibility to read and become knowledgeable with the content of this text. Once members are ready to take the Yeager test, they have two options, open book or closed book, as stated in CAPR 50-4, *Test Administration and Security*. Both options have a pass rate of 70%, correctable to 100%. This requires the test administrator to take a few minutes and review the missed questions with the examinee. Members completing either option will receive the Charles E. "Chuck" Yeager Aerospace Education Achievement Award and are authorized to wear the AE ribbon. Unit commanders, aerospace education officers (region deputy chief of staff/aerospace education [DCS/AE], wing director of aerospace education [DAE], and unit aerospace education officer [AEO]), or test control officers (TCOs) may administer the Yeager test. Local reproduction of the test is authorized, but all copies must be controlled in the same manner as the originals (see CAPR 50-4). Squadrons will send the results of the Yeager test to the wing DAE, using CAPF 126. The wing DAE will issue the Yeager Award Certificate (CAPC 20) to the squadron commanders for presentation. Wing and region headquarters units will continue to send certificates to their own personnel. Wing and region DAEs must forward the CAPF 127, *Monthly Certification Report*, to national headquarters so the members can receive credit in the national database and have their names published in the *CAP News* as award winners.

b) Aerospace Education Management Skills Development [CAPP 215 Specialty Track, *Aerospace Education Officer (AEO)*]. This element involves the orientation and training of unit AEOs. The CAPP 215 Specialty Track, developed specifically for AE staff professional growth in each unit, is available from the CAP Bookstore. The CAPP 215 Specialty Track consists of three phases, Technician, Senior and Master. All three phases are evaluated by written examination. Completion of 215T, *Aerospace Education Officer (Technician)-Specialty Track Rating*, authorizes the wearing of the AE badge. A bronze star is added to the AE badge upon completion of 215S, *Aerospace Education Officer (Senior)-Specialty Track Rating*. A gold star replaces the bronze star after completion of 215M, *Aerospace Education Officer (Master)-Specialty Track Rating*. When the 215M (Master Specialty Rating) is earned and the CAP member is an active aerospace education officer, as certified by the commander, the CAP member will be awarded the A. Scott Crossfield Award. Requests for the A. Scott Crossfield Award are submitted to NHQ CAP/ET on the "Commander's Evaluation and Rating Certification Checklist, Phase III-Master Rating." NHQ CAP/ET will issue the A. Scott Crossfield Award certificate. The associated ribbon and medal are available for purchase from the CAP Bookstore. The award certificate will be sent directly to the member unless otherwise requested. NOTE: Previously qualifying 215Ms (before 15 November 1997) may request the award from NHQ CAP/ET with a CAPF 2a and proof of 215M achievement (Part IV, mark the A. Scott Crossfield Award box).

c) Aerospace Education Leadership Requirements. This element outlines the leadership required for the aerospace education portion of the CAP mission. The term "leadership" applies to every CAP member and specifically to commanders and AE officers. The unit commander staffs each authorized AE position with individuals who conduct and support aerospace education in the unit. Region, wing, unit commanders and aerospace education officers provide leadership and assistance to ensure an effective AE program.

d) Individual Aerospace Continuing Education. This element establishes the obligation for each senior member to create his/her own individual continuing education program on aerospace topics. Every member has a personal obligation to sustain a level of aerospace knowledge that will ensure a strong professional organization. Reading professional magazines, journals, and books is a way to achieve this element. Unit AEOs can facilitate individual continuing aerospace education by conducting aerospace education programs including such things as hands-on activities, guest speakers, and field trips.

e) Aerospace Education Outreach. This element makes it the responsibility of all senior members and not just unit AEOs, to promote aerospace education within CAP and in their communities. Giving school presentations, writing newspaper articles and directing a unit hands-on activity are among those examples that exemplify the fulfillment of this element.

b. External Aerospace Education. The external AE program presents aerospace education to the public. This is accomplished through academic programs within the education system as well as other contacts between CAP members and their communities.

1) Aerospace Education Workshops (AEWs). Civil Air Patrol makes an outstanding contribution to the educational system by supporting aerospace education workshops in school systems and colleges throughout the country. These workshops are designed to provide educators with a basic knowledge of aerospace and are a part of an educational institution's course of study. Workshops are administered and directed by that institution.

2) Aerospace Education in Local Schools and Other Community Organizations. CAP personnel will cooperate with schools and other community organizations by promoting aerospace education efforts; providing aerospace education units of instruction; assisting with materials, people and appropriate programs; arranging field trips; etc.

3) Aerospace Education Materials. CAP has numerous educational materials to enhance and supplement academic curricula. These materials are available to educators and other community organizations, as well as to AEOs and other CAP members.

4) Aerospace Organizations and Agencies. Aerospace organizations, government agencies, and the private sector in each state provide aerospace education opportunities, resources, and materials. These organizations include, but are not limited to:

- State Department of Education
- State Aeronautics Commission
- Federal Aviation Administration
- National Aeronautics and Space Administration
- National Oceanic and Atmospheric Administration
- Ninety Nines
- Air Force Association
- Space Foundation
- Challenger Center
- Experimental Aircraft Association

5) National Congress on Aviation and Space Education (NCASE). The National Congress is the premier aerospace education conference in the nation. It is an annual event sponsored by CAP and the United States Air Force. The National Congress promotes an understanding of aviation and space education. Additionally, it motivates and encourages educators and others to incorporate aerospace themes into their curricula or programs. NCASE provides a forum for leaders to speak out on aerospace issues facing our nation today. CAP members are encouraged to promote and attend the National Congress.

3. Aerospace Education Positions. Aerospace education staff positions are authorized at region, wing, group, and squadron levels. Positions are filled by organizational commander appointment. The major characteristics desired of AE staff members are: (1) a high interest in and an enthusiasm for aerospace, (2) initiative and imagination in promoting aerospace education, (3) a working knowledge of the educational community and (4) the ability to work with people and recruit others to assist in promoting aerospace education.

REGION	GROUP
Deputy Chief of Staff/Aerospace Education (DCS/AE)	Aerospace Education Officer (AEO)
Internal Aerospace Education Officer (AEO)	Internal Aerospace Education Officer (AEO)
External Aerospace Education Officer (AEO)	External Aerospace Education Officer (AEO)
WING	SQUADRON
Wing Director of Aerospace Education (DAE)	(Senior) Aerospace Education Officer (AEO)
Internal Aerospace Education Officer (AEO)	(Cadet) Aerospace Education Officer (AEO)
External Aerospace Education Officer (AEO)	(Composite)
	Cadet Aerospace Education Officer (AEO) and
	Senior Aerospace Education Officer (AEO)

a. Deputy Chief of Staff/Aerospace Education (Region). The DCS/AE will:

- 1) Communicate and coordinate with the region commander in developing a region AE Plan of Action.
- 2) Report those wings submitting AE Plans of Action to the region commander.
- 3) Assist each wing DAE.
- 4) Be responsible for all AE programs at the region level.
- 5) Report to the region commander periodically on progress of region AE Plan of Action.
- 6) Submit annual AE budget.
- 7) Offer assistance to the region cadet competition team in preparation for National Cadet Competition.
- 8) Maintain a current wing DAE roster.
- 9) Give AE updates at staff meetings.

b. DCS/AE-Region Director of Aerospace Education (RDAE) team. The team will coordinate to accomplish the following:

- 1) Review region and each wing's annual AE Plan of Action and, if changes are necessary, assist with revisions.
- 2) Convene a committee, with Region Commander approval, to select a regional winner in each Brewer Award category.
- 3) Compile region listing of AEWs, including the name of the director. The RDAE will forward the list to NHQ CAP/ETA.
- 4) DCS/AE plans and conducts AE program at region conferences for CAP members; RDAE assists with program, if requested.
- 5) DCS/AE conducts an orientation for newly appointed DAEs; RDAE assists, if requested.
- 6) Contact individuals, private industry, organizations, and governmental agencies to promote and enhance the aerospace education mission.

c. Director of Aerospace Education (Wing). The wing DAE will:

- 1) Communicate and coordinate with the wing commander to develop wing AE Plan of Action.
- 2) Submit draft of annual AE Plan of Action to DCS/AE and RDAE for review.
- 3) Submit final AE Plan of Action, signed by wing commander, to DCS/AE and a copy to RDAE.

- 4) Provide end-of-year AE Activity Report – wing to the wing commander, with copies to DCS/AE and RDAE.
 - 5) Submit annual AE budget.
 - 6) Report to the wing commander periodically on progress of wing AE Plan of Action.
 - 7) Report to the DCS/AE and RDAE periodically on wing aerospace activities.
 - 8) Offer assistance to cadet competition teams in preparation for region cadet competition.
 - 9) Confer and coordinate with CAP-USAF wing liaison office to ascertain and obtain available support services.
 - 10) Monitor the CAP awards program for aerospace education.
 - 11) Work with wing public affairs officer to publicize aerospace education.
 - 12) Maintain a current AEO roster.
 - 13) Be responsible for and administer all wing AE programs.
 - 14) Assist unit AEOs.
 - 15) Conduct AE programs within the wing and at the wing conference.
 - 16) Visit units throughout the wing for evaluation and assistance.
 - 17) Complete and mail CAPF 127, *Monthly Certification Report*, to NHQ CAP/ETA as needed with copies to the DCS/AE and RDAE.
 - 18) Order CAPC 20, *Charles E. "Chuck" Yeager Aerospace Education Achievement Award (Region/Wing Level)*, and issue upon satisfactory completion of evaluation. Send certificate to unit commander within 30 days for timely presentation.
 - 19) Conduct orientations for newly appointed AEOs.
 - 20) Contact individuals, public and private industry, organizations, and governmental agencies, to promote and enhance the AE mission.
 - 21) Work with wing staff (such as the PAO) and commanders to submit Brewer Award nominations.
 - 22) Give AE updates at staff meetings.
- d. Unit AEOs.** Unit AEOs are responsible for all AE programs in the unit and for reviewing monthly verification of the Yeager Award evaluation completion:
- 1) The Senior Squadron AEO Will:
 - a) Communicate and coordinate with commander to develop unit AE goals and objectives, plan of action, and annual budget.
 - b) Report periodically to unit commander and wing DAE on AE program.
 - c) Administer and evaluate Yeager test for senior members (TCO can do this too).
 - d) Conduct AE current events portion of squadron meetings.
 - e) Maintain a squadron AE bulletin board.
 - 2) The Cadet Squadron AEO Will:
 - a) Administer both cadet and senior AE programs.
 - b) Encourage and assist cadets to complete AE requirements (CAPR 52-16).
 - c) Select, train, and supervise AE counselors to assist and guide cadets.
 - d) Report periodically to unit commander and wing DAE on AE program.
 - e) Conduct AE current events portion of squadron meetings.
 - f) Maintain a squadron AE bulletin board.
 - 3) The Composite Squadron:
 - a) AEO for cadets has the same responsibilities as the cadet squadron AEO.
 - b) AEO for seniors has the same responsibilities as the senior squadron AEO.
 - c) AEOs report periodically to unit commander and wing DAE on AE program.
 - 4) The National Capital Wing DAE will support The Congressional Squadron.
 - 5) Overseas units will receive AE support from NHQ CAP/ETA, 105 South Hansell Street, Maxwell AFB AL 36112-6332.

4. National Awards:

a. Aerospace Education Mission Awards. Points are earned by measured performance in four major aerospace education mission areas: staffing, internal program, external program, and Plan of Action. The annual Aerospace Education Activity Report - Wing provides the information used to determine points earned. Details regarding submission of the annual Aerospace Education Activity Report - Wing can be found in CAPP 15, *Aerospace Education Officers' Handbook*.

Selection Procedures. Each year, NHQ CAP/ETA compiles all the aerospace education points earned by each wing in CAP. NHQ CAP/ETA then determines the top three wings in aerospace education by point totals and declares them National Aerospace Education Mission Award winners. Further, NHQ CAP/ETA determines the top wing in aerospace education in each region by point totals and declares that wing the region Aerospace Education Mission Award winner.

b. Frank G. Brewer-Civil Air Patrol Memorial Aerospace Awards. The Brewer awards are presented in commemoration of Frank G. Brewer, Sr., because of his lifelong interest in aviation, youth, and education. Recognition is given to individuals and organizations that have made outstanding contributions, out of selfless devotion, to the advancement of youth in aerospace activities. Nominees are evaluated on CAP program support, significance of accomplishment, community involvement, and support of all facets of the aerospace education mission. Nomination forms are found in CAPP 15, *Aerospace Education Officers' Handbook*.

1) Awards Selection Criteria:

a) Category I - Civil Air Patrol Cadet. Nominee must have earned the Billy Mitchell Award and must be a current CAP member. The nomination should include a strong justification that supports an outstanding aerospace achievement or significant contribution to the aerospace field during the calendar year preceding the selection.

b) Category II - Civil Air Patrol Senior Member. Nominee must be a current CAP member. The nomination should include strong justification that supports an outstanding aerospace achievement or significant contribution to the aerospace field during the calendar year preceding the selection.

c) Category III - Individual. Nominees may include educators, state aviation officials, fixed-base operators, state superintendents of public instruction, members of the Armed Forces, members of Congress, or other individuals who have performed a noteworthy aerospace achievement or made significant contributions to the aerospace field over a continuous period of up to 10 years.

d) Category IV - Organization. Nominees may include elementary or secondary schools, colleges, universities, airlines, aircraft industries, flying schools, government agencies, associations, or other organizations which have contributed significantly to the aerospace field over a continuous period of up to 10 years.

e) Category V - Anniversary Award. (Presented every 5 years-2000, 2005, etc.) Nominees may include CAP members, educators, state aviation officials, fixed-base operators, state superintendents of public instruction, members of the Armed Forces, members of Congress, or other individuals who have performed a noteworthy aerospace achievement or made significant contributions to the aerospace field for a period of more than 20 years.

2) Procedures:

a) Any CAP member or CAP unit may submit nominations in any of the five award categories. Using the format shown in CAPP 15, nominations must be forwarded to the DCS/AE NLT 1 February. The DCS/AE-RDAE team will convene a committee to select a region winner in each category. The DCS/AE-RDAE team may obtain certificates from NHQ CAP/ETA for presentation at an appropriate region activity. The RDAE may serve only as a non-voting selection committee member.

b) The RDAE will forward names and supporting documentation of region winners to NHQ CAP/ETA NLT 1 March for national award consideration. National awardees are selected by a committee and are announced by CAP's Executive Director on or about 15 April. The national award, consisting of a cast metal plaque mounted on a wooden shield with appropriate engraving, is presented at the CAP National Board meeting.

c. Crown Circle Award. Induction into the National Congress on Aviation and Space Education Crown Circle for Aerospace Education Leadership is one of the highest honors bestowed in the field of aerospace education. Nominees are considered by the National Congress Planning Committee and may be individuals, organizations, associations, colleges or universities, school systems, government agencies, or industries. The nominees may be current or retired employees or associates of any of the Congress sponsors, supporters, or affiliates. Qualities sought in Crown Circle inductees include demonstrated performance of outstanding leadership in aerospace education over an extended term at a high level and of great quality. Induction may also be the result of exceptionally unique or extraordinarily outstanding achievement or contributions in aerospace education. Induction into Crown Circle takes place at NCASE. Nominations may be submitted by anyone; however, they must be typewritten, documented, and have the approval of the nominee. Accompanying

the nomination should be a biographical sketch and a black and white photo (5x7) . Nominations must be postmarked on or before 1 January. Submit nominations to:

NHQ CAP/ETA

Chief of Aerospace Education

105 S. Hansell St, Bldg 714

Maxwell AFB AL 36112-6332

d. A. Scott Crossfield Aerospace Education Teacher of the Year Award. The A. Scott Crossfield Aerospace Education Teacher of the Year Award recognizes and rewards aerospace education teachers for outstanding accomplishments in aerospace education and for possessing those honorable attributes expected of American educators. The Crossfield Aerospace Education Teacher of the Year Award consists of \$1,000 cash and membership in the Crown Circle of the National Congress. Accompanying the nomination should be a biographical sketch and a black and white photo (5x7). Nominations must be postmarked on or before 1 February. Submit nominations to:

NHQ CAP/ETA

Chief of Aerospace Education

105 S. Hansell St, Bldg 714

Maxwell AFB AL 36112-6332

SUMMARY OF CHANGES

This revision changes the name of the AEPSM test to the Yeager test. It also explains that the Yeager test can now be administered by unit commanders, aerospace education officers or test control officers. It also specifies procedures for sending the test results to the wing, with the wing issuing the Yeager certificate and forwarding monthly certification report to national headquarters. This revision mentions that all three phases of the 215 Specialty Track are evaluated with written examinations. This revision added Challenger Centers and the Experimental Aircraft Association as organizations that offer aerospace opportunities.